

IN THE CLAIMS:

A rewritten version of the amended claims is as follows:

53
A1
11. (Amended) A method in a data processing system for performing a raster operation of graphics data, wherein the data processing system includes a system memory and a video memory, wherein the system memory and the video memory are connected by a bus and wherein the graphics data is organized into picture elements, the method comprising the data processing system implemented steps of:

selecting a first plurality of picture elements from the system memory;
selecting a second plurality of picture elements from the video memory,
wherein the first plurality of picture elements and the second plurality of picture elements are selected such that changes in a direction of data on the bus are minimized when performing raster operations on the first plurality of picture elements and the second plurality of picture elements;
reading the first plurality of picture elements from the system memory;
reading the second plurality of picture elements from the video memory;
performing a raster operation on the first plurality of picture elements and the second plurality of picture elements to form a plurality of processed picture elements; and
writing the plurality of processed picture elements to the video memory, wherein changes in the direction of data on the bus are minimized between the reading and writing of picture elements.

53
A2
12. (Amended) A data processing system comprising:
a bus;
a system memory connected the bus, wherein a first plurality of graphics elements are located within the system memory;
a video memory connected to the bus, wherein a second plurality of graphics elements are located within the video memory;

A3
Coul

a processor unit connected to the bus, wherein the processor unit executes instructions to select a first plurality of picture elements from the system memory; select a second plurality of picture elements from the video memory in which the first plurality of picture elements and the second plurality of picture elements are selected such that changes in a direction of data on the bus are minimized when performing raster operations on the first plurality of picture elements and the second plurality of picture elements; read the first plurality of picture elements from the system memory; read the second plurality of picture elements from the video memory; perform a raster operation on the first plurality of picture elements and the second plurality of picture elements to form a plurality of processed picture elements; and write the plurality of processed picture elements to the video memory in which changes in the direction of data on the bus are minimized between the reading and writing of picture elements.

NE

17. (Amended) The data processing system of claim 12, wherein a graphics engine performs the raster operation.

18. (Amended) The data processing system of claim 12, wherein a video driver performs the raster operation.

A3
B3

19. (Amended) A data processing system for performing a raster operation of graphics data, wherein the data processing system includes a system memory and a video memory, wherein the system memory and the video memory are connected by a bus and wherein the graphics data is organized into picture elements, the data processing system comprising:

first selecting means for selecting a first plurality of picture elements from the system memory;

second selecting means for selecting a second plurality of picture elements from the video memory, wherein the first plurality of picture elements and the second plurality of picture elements are selected such that changes in a direction of data on the bus are

minimized when performing raster operations on the first plurality of picture elements and the second plurality of picture elements;

reading means for reading the first plurality of picture elements from the system memory;

reading means for reading the second plurality of picture elements from the video memory;

performing means for performing a raster operation on the first plurality of picture elements and the second plurality of picture elements to form a plurality of processed picture elements; and

writing means for writing the plurality of processed picture elements to the video memory, wherein changes in the direction of data on the bus are minimized between the reading and writing of picture elements.

30. (Amended) A computer program product in a computer readable medium for performing a raster operation of graphics data, wherein the data processing system includes a system memory and a video memory, wherein the system memory and the video memory are connected by a bus and wherein the graphics data is organized into picture elements, the computer program product comprising:

first instructions for selecting a first plurality of picture elements from the system memory;

second instructions for selecting a second plurality of picture elements from the video memory, wherein the first plurality of picture elements and the second plurality of picture elements are selected such that changes in a direction of data on the bus are minimized when performing raster operations on the first plurality of picture elements and the second plurality of picture elements;

third instructions for reading the first of a first plurality of picture elements from the system memory;

fourth instructions for reading the second plurality of picture elements from the video memory;